

Weekly Report

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Research

- **Narrowing down my ideas (cont.)** This week I revised two VAST active learning papers and found that they just implemented the most basic framework in active learning, i.e. uncertainty sampling in classification. It reminds me of my transfer-learning project which might be available if we just finish a most basic one. I also read [1], [2] and [3] to find latest active learning frameworks that can be used in visual analytics.
- **Ongoing VAST 2012 and InfoVis 2012 Survey (cont.2)** I read [4] and [5] this week. [5] is related to evaluations of systems in visual analytics used by domain experts. [4] builds a novel framework for data feature extraction such as clusters, outliers and trends with semantics.

Practice & Skills

None.

Miscellaneous

- **Textbook (cont.)** This Tuesday Prof. Wu and I discussed the new content of our textbook and made a draft version.

Plan for Next Week

- Prepare for idea evaluation meeting on Nov.21;
- go on preparing for convex analysis final exam.

References

- [1] X. Shi, W. Fan, and J. Ren, “Actively Transfer Domain Knowledge,” in *ECML PKDD’08: Proceedings of the European conference on Machine Learning and Knowledge Discovery in Databases - Part II*, pp. 342–357, June 2008.
- [2] P. Rashidi and D. J. Cook, “Ask me better questions: active learning queries based on rule induction,” in *KDD ’11 Proceedings of the 17th ACM SIGKDD international conference on Knowledge discovery and data mining*, ACM Request Permissions, Aug. 2011.

- [3] P. Cai, W. Gao, A. Zhou, and K.-F. Wong, “Relevant knowledge helps in choosing right teacher: active query selection for ranking adaptation,” in *SIGIR '11: Proceedings of the 34th international ACM SIGIR conference on Research and development in Information Retrieval*, pp. 1–10, ACM Request Permissions, July 2011.
- [4] E. Kandogan, “Just-in-Time Annotation of Clusters, Outliers, and Trends in Point-based Data Visualizations,” 2012.
- [5] Y.-a. Kang and J. Stasko, “Examining the Use of a Visual Analytics System for Sensemaking Tasks: Case Studies with Domain Experts,” *IEEE Transactions on Visualization and Computer Graphics*, vol. 18, no. 12, pp. 2869–2878, 2012.